

come and get this ASAP!

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Tom

Please have a copy of this marked up
Today (Monday 13 July) with one or two
words on present status of each finding
e.g. Completed; in progress, will be completed by

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REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
HEADQUARTERS, U.S. ARMY MATERIEL COMMAND
5001 EISENHOWER AVENUE, ALEXANDRIA, VA 22333 - 0001



AMCEN-A (200-1a)

18 June 1992

MEMORANDUM THRU Commander, U.S. Army Armament, Munitions and Chemical Command,
~~Rock Island, IL 61299-6000~~

FOR Commander, U.S. Army Armament Research, Development and Engineering
Center, Picatinny Arsenal, NJ 07806-5000

SUBJECT: Report of Environmental Compliance Review (ECR) at U.S. Army
Armament Research, Development and Engineering Center (ARDEC)

1. During the period 6-10 Apr 92, representatives of the USAMC Installations and Services Activity (AMC I&SA) conducted an ECR at ARDEC. This final report of the ECR (encl) is a follow-up to the unofficial working report transmitted previously.
2. The purpose of the review was to determine ARDEC's compliance status with Federal, State, local, and Army environmental regulations; to identify current or potential environmental issues; and to provide recommendations for improving the effectiveness of the environmental program management.
3. In general, the review team found substantial improvements in most media areas of the ARDEC environmental program since the 1986 Planning Research Corporation environmental audit. Most new issues were related to required management plans/programs for air, pest management, potable water, and noise. All findings and recommendations noted during the ECR are discussed in detail in paragraphs 1 through 10 of the report. Response to all findings shall be sent to AMC I&SA, AMXEN-U, Rock Island, IL, 61299-7190, with a copy to this Headquarters (AMCEN-A) within 180 days of the date of this memorandum. Prompt resolution of all findings is recommended.
4. The content of the report was discussed at the exit briefing. The ECR Recommendations Report (annex B to enclosure) is provided for ARDEC's use to address and resolve the potential problem areas identified during the review.
5. The ECR reports are internal working documents and will not normally be released to the general public. Release upon request will be at the discretion of the installation commander. Any recommendation for the denial of a request for the report made pursuant to the Freedom of Information Act should be referred to the Chief of Engineers through this Headquarters (AMCEN-A) and the Army Environmental Office (ENVR-E) IAW AR 340-17, paragraph 5-200.
6. AMC -- America's Arsenal for the Brave.

Encl

William B. McGrath
WILLIAM B. McGRATH
Major General, USA
Chief of Staff

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AMXEN-U

ENVIRONMENTAL COMPLIANCE REVIEW

INSTALLATION AND DATE OF REVIEW:

U.S. Army Armament Research,
Development and Engineering
Center (ARDEC)
6-10 Apr 92

TEAM PERSONNEL:

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PRINCIPAL PERSONS CONTACTED:

BG W. Holmes, Commander, ARDEC
COL R. Gilligan, Jr., Chief of Staff
Mr. T. Solecki, Environmental Affairs Officer
CPT J. Dell'Omo, Sanitary Engineer, U.S. Army Materiel Command (AMC)
Mr. F. Novak, Environmental Protection Specialist, U.S. Army Armament,
Munitions and Chemical Command (AMCCOM)

A list of all personnel contacted during the Environmental Compliance Review (ECR) is contained in the POC Report (annex A).

PURPOSE: This ECR was performed to determine ARDEC's environmental compliance status, to identify current or potential environmental issues, and to provide a plan for improving the effectiveness of the environmental program management.

BACKGROUND: A formal notification memorandum detailing the ECR purpose and scope was sent to ARDEC on 12 Dec 91. Several environmental documents had been requested and were received from ARDEC before the visit.

REFERENCE FOR ECR FINDINGS: A summary of the facilities reviewed and issues noted is displayed in the ECR Recommendations Report (annex B).

SUMMARY OF ECR FINDINGS: The following represents the constructive evaluation by the team in each environmental media:

1. Environmental Management.

a. General:

(1) The ARDEC at Picatinny Arsenal (PTA), NJ, was a Government-owned, Government-operated facility, serving as a major organizational element of HQ AMCCOM. While PTA had a long history of munitions manufacturing, current activities were primarily in the research, development, and life-cycle engineering of assigned armaments, munitions systems, and materiel. Due to the size (over 6,500 acres and 5,000 personnel), production history, and complexity of operations, a fully developed environmental program was in place. The Environmental Affairs Division (EAD) consisted of 24 personnel, led by the Environmental Affairs Officer, and organized into Air/Water, Environmental Restoration, and Hazardous Materials branches. Additional environmental management positions were being developed in the Engineering and Housing Division of the Installation Support Activity to handle operational activities. Dedicated environmental support positions were being sought in the Safety and Public Affairs Offices.

(2) Commendable initiatives included the assignment of local Environmental Coordinators in all environmentally active ARDEC directorates, as well as placing environmental responsibilities in the job performance standards of applicable workers, managers, and supervisors. Responsibilities were clearly stated in the Environmental Management Plan and endorsed by the Commander. Training was a large, well-managed program affecting all levels of the organization. The EAD was initiating the use of automated electronic-mail training notification and follow-up, as well as permit expiration notification, publicity, and similar functions.

(3) ARDEC had made substantial improvements in environmental programs and compliance since the 1986 Planning Research Corporation Engineering audit. Emerging Comprehensive Environmental Response, Compensation, and Liability Act issues will be the next major environmental thrust, and EAD should prepare accordingly.

b. Detailed Findings:

OBSERVATION: General files in the EAD were not indexed.

(a) BACKGROUND: The numerous records generated through environmental activities should be complete, well organized, and readily retrievable. Good documentation organized along the reporting and program requirements of Federal, State, and Army environmental laws and regulations can be critical to demonstrating and maintaining compliance. Files should be indexed to facilitate usage and maintenance, especially in the event of personnel turnover, reorganizations, etc.

(ARDEC ECR Cont)

(b) CRITERIA: Best Management Practice (BMP)
AR 25-400-2, "The Modern Army Recordkeeping
System (MARKS)," 15 Oct 86

(c) DISCUSSION: EAD had exceptional central library and reference files. Correspondence files were both centralized (general correspondence, programs, and plans) under the control of a central records manager, as well as localized (working files of each action officer). Completed actions were boxed and archived in a remote location. However, functional or MARKS indexes were not available for the centralized or local files. MARKS designators were only assigned to files being archived.

(d) RECOMMENDATION: Develop formal indexes of environmental files.

2. Air.

a. General:

(1) ARDEC operated a variety of air emission sources and held over 50 New Jersey State air emission permits which were current or in various stages of review or approval. A comprehensive air source inventory had also been developed by the installation both in support of State requirements and as an internal initiative. The main boiler plant was permitted for operation on both gas and oil, but was operated primarily on gas, with oil as the standby fuel. The Open Burning (OB) and Open Detonation (OD) of waste (or test) explosives was accomplished at several sites on the installation. An air stripping unit was located at the main water treatment plant for removal of volatiles (primarily trichloroethylene) from the drinking water wells. This unit was appropriately permitted, although a permit modification was anticipated to address some collateral radon emissions. Another air stripping unit had been recently constructed as part of a groundwater pollution remediation system. This unit was also appropriately permitted, although the system had not been officially activated. Numerous smaller sources consisted of paint booths, degreasers, diesel generators, and smaller boilers. There were no major active industrial operations on the installation. It was anticipated that more accurate seasonal fuel usage data for specific ARDEC sources would be required in the near future to better respond to State requirements.

(2) Asbestos Containing Material (ACM) at ARDEC was very widespread, and in most cases, in very poor condition. ARDEC had not completed an installation-wide survey to identify the existence, extent, and condition of ACM; nor had there been a written asbestos management plan developed to control subject material. There had been ACM removal activities accomplished by in-house personnel and by a delivery order service contract, but removal activities were limited to near emergency conditions. All personnel were required to comply with Federal, State, and local rules and regulations while performing activities involving asbestos.

(3) Radon detectors had been purchased, deployed, and retrieved in most buildings, and buildings requiring mitigation had been identified. However, records indicate that several detectors had been removed from their locations by unauthorized personnel. Therefore, the potential radon levels at these locations were not known.

b. Detailed Findings:

(1) OBSERVATION: The underground fuel storage tanks at building 3801 did not have submerged fill pipes.

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(ARDEC ECR Cont)

(a) BACKGROUND: Vapor emissions during tank filling operations are substantially reduced when the outlet of the fill pipe is below the surface of the liquid in the tank. The cited regulations prohibit the transfer of a Volatile Organic Substance (VOS) into a tank of over 2000-gallon capacity unless the fill pipe extends to within 6 inches of the bottom of the tank.

(b) CRITERIA: New Jersey Administrative Code (NJAC) 7:27, 16.3(a)

(c) DISCUSSION: The two tanks were used for JP-4 jet fuel which qualified as a VOS. Although the tanks were operated and maintained by the New Jersey National Guard as a tenant on the installation, compliance responsibility still rested with ARDEC as the host.

(d) RECOMMENDATION: Extend the fill pipes to within 6 inches of the bottom of the tanks.

(2) OBSERVATION: An asbestos management plan and installation-wide asbestos survey had not been completed.

(a) BACKGROUND: An installation-wide survey followed by an asbestos management plan is required to minimize environmental release and subsequent occupational and incidental exposure to asbestos fibers.

(b) CRITERIA: AR 200-1, chapter 10
40 CFR 763

(c) DISCUSSION: Project PI0089S017, "Asbestos Survey of Buildings," had been identified as a requirement on ARDEC's RCS 1383 since FY 89. In FY 90, a multi-phase asbestos survey contract was developed, but there were no records presented to reflect the status of this contract. Government personnel indicated that a partial survey had been completed, but the work had been accomplished by contractor personnel.

(d) RECOMMENDATIONS:

1 Complete an installation-wide asbestos survey.

2 Develop and execute a comprehensive asbestos management plan.

3 Ensure that personnel (contractor or Government) performing in both the installation-wide survey and the development of an asbestos management plan are trained at the appropriate level.

(ARDEC ECR Cont)

(3) **OBSERVATION:** Notifications of asbestos activities were not submitted to the appropriate agency.

(a) **BACKGROUND:** Notifications of asbestos activities are to be submitted to the U.S. Environmental Protection Agency (EPA) Regional Office. The Regional Office may delegate authority to qualifying States and allow those States to implement and enforce standards for notification requirements. In such cases, parties involved with asbestos activities must submit notification to both the EPA and their respective State environmental agency. In addition, the EPA may permit all or some of the information to be submitted to the State agency only, instead of to the EPA and the State agency. The State of New Jersey, however, had not been delegated enforcement authority by the EPA. Instead, the New Jersey Department of Labor (NJDL) had a similar but independent requirement for a notification of intent to perform asbestos work.

(b) **CRITERIA:** 40 CFR 61.04
NJAC 12:120-7.1 and 8:60-7.1

(c) **DISCUSSION:** ARDEC had properly notified the EPA region on asbestos activities exceeding lineal and square footage limits, but indicated that the NJDL did not request to receive this notification formally other than by telephone. There were no written records to substantiate these arrangements.

(d) **RECOMMENDATION:** Prepare a detailed Memorandum for Record which includes the date, time, contents of the call, and the NJDL representative's name.

(4) **OBSERVATION:** Government personnel had not received adequate asbestos training.

(a) **BACKGROUND:** Asbestos regulations require employers to provide educational programs and various levels of training for employees identified to work with asbestos. Following initial training, refresher courses are required. For certain levels of performance, it is mandatory that individuals receive refresher training, successfully pass an examination, and receive a certificate.

(b) **CRITERIA:** 29 CFR 1926
40 CFR 763

(c) **DISCUSSION:** During the period 1 Oct 91-31 Mar 92, there were 65 repair and asbestos abatement projects performed by in-house personnel. Regulations require that an onsite representative knowledgeable in asbestos demolition, renovation, and acceptable means for compliance be

(ARDEC ECR Cont)

present when asbestos materials are handled or disturbed. The initial training requirement for such an individual (supervisor or foreman) is 4 days. Records indicate that in-house personnel have only received 3 days of training, which is applicable for asbestos abatement workers only.

(d) RECOMMENDATION: Provide appropriate levels of training for individuals that are required to serve in capacities other than asbestos abatement workers.

(ARDEC ECR Cont)

3. Wastewater.

a. General:

(1) ARDEC operated a pretreatment plant which consisted of primary sedimentation followed by secondary treatment with a trickling filter and clarifier. Excess sludge was disposed of by a licensed contract waste hauler. The effluent was discharged to the Rockaway Valley Regional Sewerage Authority (RVRSA) system for additional treatment. RVRSA began treating the effluent in Sep 91 when the flow was diverted from a permitted surface water discharge at ARDEC to the RVRSA system. The flow diversion was part of the Administrative Consent Order (ACO) from the State of New Jersey to correct violations of the Water Pollution Control Act and the conditions of the New Jersey Pollution Discharge Elimination System permit issued to ARDEC.

(2) The diversion of the effluent to the RVRSA system was authorized by a Federal Facility Sewer Connection Permit, which also regulated influent and effluent parameters. A review of monitoring reports indicated that the required influent and effluent tests were performed at the frequencies required by the permit, and the results were within permit limitations. The contract laboratory performing the analyses was State certified to perform the required tests. The operators of the pretreatment plant were State certified at the required level of competency.

(3) The wastewater collection system was undergoing significant sewer main replacements to eliminate unpermitted discharges resulting from excessive storm water inflow and groundwater infiltration. Additionally, a new treatment facility had just been placed in operation at building 506 for oil removal. These projects were required by the ACO.

(4) The Phase I replacement of a portion of the wastewater collection system was under construction. The preliminary study (for the Phase II replacement of the remaining collection system) was complete, and project design was pending. Action had been taken to include a Phase III project, consisting of lift station replacements, IAW the ACO to administratively resolve unpermitted discharge violations resulting from lift station overflows.

b. Detailed Findings:

OBSERVATION: Discharges of noncontact cooling water into the RVRSA system had occurred in violation of the permit.

(a) BACKGROUND: The discharge of cooling water into the RVRSA system is prohibited by the cited criteria.

(b) CRITERIA: RVRSA Federal Facilities Sewer Connection Permit, Section 5

(ARDEC ECR Cont)

(c) DISCUSSION: As a result of a comprehensive sewer system inspection survey, the EAD had discovered numerous unpermitted wastewater discharges going directly into storm drainage. The active discharges had been physically disconnected, except those consisting of an intermittent flow of noncontact cooling water of less than 5 gallons per minute, which was connected to the wastewater collection system. The noncontact cooling water was pretreated at the wastewater pretreatment plant, building 80, prior to discharge to the RVRSA system. Verbal discussions were held with the RVRSA engineer prior to connecting the noncontact cooling water discharges to the wastewater collection system; however, no written amendment to the permit was made.

(d) RECOMMENDATION: Amend the permit to allow minor intermittent flows of noncontact cooling water to be discharged into the sewage system.

4. Spills.

a. General: ARDEC's current Spill Prevention Control and Countermeasure Plan (SPCCP) and Installation Spill Contingency Plan (ISCP) were both dated Mar 91 and had been certified, as required, by a professional engineer. Contract specifications were being prepared to update the SPCCP IAW the New Jersey Department of Environmental Protection and Energy (NJDEPE), NJAC, title 7, chapter 1E, effective 12 Sep 91. A date of Aug 92 had been selected for completion of these contracts. The current SPCCP had several noted deficiencies of various magnitude that required correction in order to meet compliance requirements. A commendable tracking and monitoring system had been developed by the Engineering and Housing Division and EAD to ensure that funding requirements either through the RCS 1383 process or individual job orders were identified. Installation personnel appeared acutely aware of their responsibilities of preventing spills of oil and hazardous substances. Annual training (spill simulations) in the SPCCP/ISCP were performed. Oil and hazardous material spills at ARDEC were documented, on file, and reported on time to the appropriate Federal and State agencies.

b. Detailed Findings:

OBSERVATION: The appropriate Emergency Planning and Community Right-to-Know Act (EPCRA) notification had not been accomplished.

(a) BACKGROUND: Army policy regarding the EPCRA (also known as Superfund Amendments and Reauthorization Act (SARA) of 1986, Title III) is that all Department of Defense (DOD) components should comply with the conceptual requirements of the Act to the maximum extent practical. Generally, this entails providing a representative to participate in the local emergency planning committee and to maintain an emergency notification plan for release of regulated substances.

(b) CRITERIA: 40 CFR 355

DOD SARA Title III Policy Letter, 3 Jun 87
Memorandum, AMCEN-A, 16 Mar 92, subject:
Spill Prevention, Control and Countermeasures
Plan (SPCCP), Installation Spill Contingency
Plan (ISCP), and Emergency Planning, Community
Right-to-Know (EPCRA) Compliance Status
AR 200-1, chapters 1 and 8

(c) DISCUSSION: Interviews with various members of the ARDEC staff indicated that they were unaware of the requirements under EPCRA. While the fire department did maintain contact with, and did coordinate with, various local offpost organizations connected with disaster planning, formalized procedures had not been established.

(ARDEC ECR Cont)

(d) RECOMMENDATIONS:

1 Contact the New Jersey State Emergency Response Commission to establish ARDEC's role in the State SARA Title III structure.

2 Ensure the EPCRA information is included in the revision of the ARDEC SPCCP and ISCP.

(ARDEC ECR Cont)

5. Hazardous Waste.

a. General:

(1) ARDEC was a Resource Conservation and Recovery Act (RCRA) permitted facility for Hazardous Waste (HW) storage (received from the NJDEPE on 8 Mar 91) and was pursuing a Subpart X (thermal treatment) permit and an incinerator permit. The Arsenal had three permitted container storage areas (buildings 1094, 3100, and 3114), two storage tank areas (buildings 31 and 95), two 90-day tank storage areas, and OB/OD grounds. Additionally, ARDEC had approximately twenty 90-day container storage areas and 150 satellite container accumulation areas. All generating sites must comply with NJAC 7:26 and applicable Federal regulations (i.e., 40 CFR 268). Additionally, ARDEC had published its own HW regulation, ARDECR 420-47, and training regulation, ARDECR 385-X.

(2) RCRA closures were performed at 47 sites where HWs were stored over 90 days. Site work had been completed for these closures, and reports had been submitted to the NJDEPE for review and approval. Reportedly, it was anticipated that approval will be received in FY 92.

(3) The NJDEPE performed a RCRA inspection on 19 Feb 92 and no Notices of Violation were issued as a result of this inspection. The NJDEPE had reviewed manifests, monthly HW satellite inventory logs, and contingency plans and had inspected buildings 3100 and 3114 permitted storage areas, building 3150 90-day accumulation area, and building 31 satellite storage areas. The inspectors noted concerns that IAW NJAC 7:26-9.7(y) Contingency Plan, the home addresses of key personnel were not included as required, but were on file. Also, NJDEPE noted that building 3100 contained waste stored over 1 year. Prohibitions on storage of restricted waste (40 CFR 268.50(c)) allows for storage beyond 1 year. However, the owner/operator bears the burden of proving that such storage is solely for the purpose of accumulation as necessary to facilitate proper recovery, treatment, or disposal (NJDEPE does not have primacy over 40 CFR 268). Additionally, NJDEPE had concerns that semi-annual drills to test emergency response capabilities (IAW procedures developed pursuant to New Jersey's Contingency Plan requirements) were not conducted and did not involve local agencies' assistance. ARDEC had records of actual incidents to verify emergency response capabilities had been tested, without, however, involving local agencies. ARDEC may wish to consider testing local agency response assistance for major incident preparation.

(4) With regard to ARDEC's Underground Storage Tank (UST) program, new NJDEPE regulations required all UST removals to be investigated for evidence of contamination. Twenty-three USTs had been investigated in FY 91 and reports submitted to the NJDEPE for review and approval. Site visits and records reviews were conducted at the Air National Guard tenant heliport (three USTs at building 3801) and the building 311 unleaded gasoline tank.

b. Detailed Findings:

(1) OBSERVATION: Large covered steel roll-off containers had been used to store HW soil debris from two separate HW tank closures.

(a) BACKGROUND: During the partial and final closure periods, all soils shall be properly disposed of or decontaminated. By removing any HWs during partial and final closure, the owner or operator may become a generator of HW. A generator who accumulates HW for more than 90 days is an operator of a storage facility and is subject to all applicable standards and requirements of NJAC 7:26-9.3 and the permit requirements of NJAC 7:26-12.1 et seq., unless the accumulation is less than 55 gallons of HW, or less than 1 quart of acutely HW, or the generator has been granted a temporary extension in writing to the 90-day period by the NJDEPE Division of Hazardous Waste Management prior to exceeding the 90-day storage period.

(b) CRITERIA: NJAC 7:26-7.4, 8.0, 9.3, 9.8(k)

(c) DISCUSSION: Seven 20-cubic yard roll-off containers at building 24 had been stored since Sep 91 without a permit. A time extension was not requested from the regulators for continued storage of the seven containers of F006 HW soil debris. Also, approximately twenty-five 20-cubic yard roll-off containers of HW soil debris from the building 95 tank closures had been in place since Feb 92.

(d) RECOMMENDATIONS:

1 Immediately dispose of the seven containers of HW soil debris from the building 24 tank closures.

2 Ensure the twenty-five containers of HW soil debris from building 95 tank closures are disposed of within the allowed 90-day storage limit.

(2) OBSERVATION: Five rusted orphan drums with waste and/or precipitation accumulation were in an unauthorized accumulation area at bay 2 of building 31.

(a) BACKGROUND: None.

(b) CRITERIA: NJAC 7:26-7.4, 8.0, 9.3, 9.4

(c) DISCUSSION: Two of the rusted containers were open and had labels stating the containers once held ethylene glycol. The other three containers were unmarked and unlabeled.

(ARDEC ECR Cont)

(d) RECOMMENDATION: Remove, determine contents, and appropriately dispose of the five rusted containers at located at bay 2 of building 31.

(3) OBSERVATION: The odor of alcohol was prevalent at a tank within the inactive and unmanned building 519, which was documented to have contained spent alcohol/ether.

(a) BACKGROUND: Table 4.1 of the U.S. Army Toxic and Hazardous Materials Agency Remedial Investigation Concept Plan for Picatinny Arsenal, Volume 1, Mar 91 (Final Report) reports that buildings 519 and 519A contained inactive HW tank storage areas. Building 519A tank closure was completed, and the closure report was submitted to the State on 17 Dec 91.

(b) CRITERIA: NJAC 7:26-9.7, 9.8, 10.5

(c) DISCUSSION: A closed tank with unknown contents within building 519 (adjacent to building 519A) was not included in the RCRA closure program at ARDEC. This appeared to be an unintentional oversight. Upon discovery by representatives of ARDEC and the USAMC Installations and Services Activity (AMC I&SA) ECR team, an immediate investigation was undertaken. There was no status determination at the time of the exit briefing.

(d) RECOMMENDATIONS:

1 Determine regulatory status of the building 519 tank.

2 Exercise the contingency plan and emergency procedures for the tank at building 519.

3 Appropriately close, remediate, and/or remove the building 519 tank and dispose of contents and any spill residues properly.

(4) OBSERVATION: Interior inventory control and manual tank gauging methods were not at the required inventory measurement precision for the 10,500 gallon unleaded gasoline bare steel UST at building 311.

(a) BACKGROUND: EAD memorandums to ARDEC UST areas, dated 23 Apr 91 and 24 Feb 92, informed that New Jersey UST regulations and an Army Regulation (AR 200-1) require general operating procedures for inventory control and conciliation. Regulations require measuring the level of product over the full range of the tank's height to the nearest one-eighth inch.

(b) CRITERIA: NJAC 7:14B-5.4

(ARDEC ECR Cont)

(c) DISCUSSION: Reportedly, tank inventory measurements were only to the nearest one-fourth inch and records indicated only to the nearest one-half inch.

(d) RECOMMENDATION: Ensure UST product level measurements are over the full range of the UST's height to the nearest one-eighth inch.

(ARDEC ECR Cont)

6. Solid Waste.

a. General:

(1) The ARDEC EAD had been working with the Engineering and Housing Division to upgrade the solid waste/recycling program at ARDEC. This included investigating compost alternatives on and off post via a compost permit or an agreement with the Morris County Municipal Authority to use their compost facility. In addition, work had been ongoing to improve the recycling program. Recycling of office paper was included within their solid waste disposal contract. ARDEC had just formed a Total Quality Management team for investigating and forming an aluminum can and cardboard recycling program installation wide. There were no active onpost solid waste landfills.

(2) Medical wastes generated at the Health Clinic and the adjacent Dental Health Facility were disposed of at Fort Monmouth, NJ. To ensure that the waste was properly labeled, stored, and documented prior to disposal, the EAD had been performing weekly inspections of the Health Clinic and helped the Clinic prepare the annual medical waste report to the NJDEPE in July.

b. Detailed Findings:

OBSERVATION: Segregation of medical waste needed improvement.

(a) BACKGROUND: Medical waste should be segregated prior to shipment into three categories; sharps (New Jersey Classes 4 and 7), fluids, and other regulated medical wastes. It is a good management practice to use authorized medical waste-type containers and physically separate the medical waste containers from the nonmedical waste containers to reduce the amount of medical waste which requires disposal and reduces the possibility of improperly disposing of regulated medical wastes.

(b) CRITERIA: NJAC 7:26.3A.10(a) and (b)

(c) DISCUSSION: In the Dental Health Facility, the medical waste containers were not physically separated from the nonmedical waste container to prevent cross-contamination through unintentional disposal of medical and nonmedical wastes in the wrong containers. Also, the Dental Health Facility did not use authorized medical waste containers uniform to those used at the Health Clinic. The medical waste was bagged and segregated in one container for shipment. Sharps and other regulated medical wastes were shipped together in one container. Safety and environmental regulations may require segregation of these two classes into separate containers.

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(ARDEC ECR Cont)

(d) RECOMMENDATIONS:

1 Medical Waste Storage Area: Segregate sharps from other regulated medical waste and place in separate containers prior to shipment to Fort Monmouth, NJ.

2 Dental Health Facility: Obtain and utilize medical waste containers uniform with those from the Health Clinic.

3 Physically separate the medical waste container and the nonmedical waste container so they are not adjacent to one another.

(ARDEC ECR Cont)

7. Toxic Substances.

a. General: ARDEC was actively engaged in a well developed program for the management of Polychlorinated Biphenyls (PCBs). The disposal of all transformers with PCB concentrations of over 500 parts per million (ppm) had recently been completed. This action alone eliminated many inspection and marking requirements. Also, many items had been retrofilled and reclassified to lower PCB concentrations. Approximately 100 transformers with less than 500 ppm of PCB still remained in service. Waste PCBs were considered a HW in the State of New Jersey, and disposal was regulated by both the Toxic Substance Control Act and the RCRA. Disposal actions were accomplished through an onsite waste contractor. Considerable documentation was maintained for existing items as well as for disposal actions. This included an inventory of remaining transformers below 500 ppm, disposal manifests, certificates of reclassification, certificates of disposal, and past annual inventory documents.

b. Detailed Findings:

(1) OBSERVATION: The PCB waste storage building was not appropriately marked.

(a) BACKGROUND: Marking of PCB storage areas is required to alert waste handling and emergency response personnel to the precautions required and the dangers involved in the presence of PCBs. Regulations are very specific as to the size, wording, and color of the markings required.

(b) CRITERIA: 40 CFR 761.40(a)(10)
40 CFR 761.45(a)

(c) DISCUSSION: Building 3114, used for waste PCB storage, was plainly marked as containing PCBs. However, the markings did not conform to the regulatory format.

(d) RECOMMENDATION: Attach the regulatory markings to the building.

(2) OBSERVATION: Some transformers remaining in service were marked unnecessarily.

(a) BACKGROUND: Transformers with greater than 500 ppm PCB concentrations are more closely regulated than those of lesser concentrations due to the higher potential environmental risks. The stronger regulations include specific markings, periodic inspections, and registration with fire response personnel. These regulations do not apply to transformers below 500 ppm.

(ARDEC ECR Cont)

- (b) CRITERIA: 40 CFR 761.40(a)(2)
40 CFR 761.30(a) (Referenced)

(c) DISCUSSION: Although all the transformers over 500 ppm had been removed from the installation, most of the remaining ones which were below 500 ppm were marked as if they contained over 500 ppm. This was not a violation; however, it implied that more stringent regulations were applicable. Alternate markings are available which indicate the actual PCB concentration range and their use is encouraged to avoid confusion.

(d) RECOMMENDATION: Remove inapplicable markings from the transformers.

(ARDEC ECR Cont)

8. Pesticides.

a. General:

(1) A detailed pest management program review was conducted by the U.S. Army Environmental Hygiene Agency (USAEHA) 9-12 Jan 90. A written report with recommendations was provided. Most of the noted deficiencies had been corrected. An outdoor mixing area with appropriate containment and upgrade of the indoor mixing sink was programmed for construction at building 3157. Current outdoor mixing was accomplished at the golf course facility (building 161). Both buildings met requirements as pesticide storage facilities. Written pesticide spill response procedures were maintained at both sites. Applicators were DOD trained and certified and were enrolled in the medical surveillance program.

(2) Pesticide materials at the Commissary and Post Exchange were properly displayed and segregated to prevent contamination. Spill kits and instructions for use were readily available. Phone numbers, in the event of a spill, were posted, and individuals were knowledgeable in emergency response procedures.

b. Detailed Findings:

(1) OBSERVATION: An Installation Pest Management Plan (IPMP) had not been prepared and approved by the AMC Pest Management Consultant (PMC).

(a) BACKGROUND: None.

(b) CRITERIA: AR 420-76, paragraph 3-2, and appendix C
DOD Directive 4150.7

(c) DISCUSSION: A written, comprehensive IPMP is needed for a safe, efficient, and cost-effective pest control program. The cited criteria states pest management plan requirements. In addition to pest control operations conducted by the Engineering and Housing Division, the operations conducted by the golf course, and the pest management materials dispensed through the self-help program require inclusion into the plan. The lack of an IPMP was documented in the 9-12 Jan 90 pest management program review conducted by USAEHA.

(d) RECOMMENDATION: Prepare an IPMP and submit to AMC I&SA for approval, utilizing guidance contained in AR 420-76, appendix C.

(2) OBSERVATION: A pest control contract entitled, "Selective and Complete Weed Control," had been submitted to procurement and was awaiting award, without Major Army Command (MACOM) technical review and approval.

(ARDEC ECR Cont)

(a) BACKGROUND: None.

(b) CRITERIA: AR 420-76, paragraph 4-3

(c) DISCUSSION: Augmentation contracts may be utilized when necessary pest management operations cannot be accomplished by existing in-house personnel. The pest control provisions of all contracts must be reviewed for technical accuracy and approved by the MACOM PMC prior to seeking procurement. MACOM review and approval is to ensure all health and safety issues that may effect installation personnel, as well as compliance with environmental law, are addressed.

(d) RECOMMENDATION: Ensure all contracts for pesticide operations are submitted to the AMC PMC for technical review and approval prior to seeking procurement.

(3) OBSERVATION: Monthly summary reports for pest management activities were not submitted as required.

(a) BACKGROUND: The cited criteria requires that various records of pest control activities be maintained and written summary reports of these activities prepared monthly. The Pest Management Report, DD Form 1532, is to be submitted to the AMC PMC, the Installation Preventative Medicine Officer, and the USAEHA.

(b) CRITERIA: AR 420-76, paragraph 4-4c(1)(3)(4)a

(c) DISCUSSION: Daily records for pest management activities conducted by in-house forces and golf course personnel were maintained. Records of pesticides dispensed through the self-help program were not reported to the installation Pest Management Program Coordinator (PMPC).

(d) RECOMMENDATIONS:

1 Ensure all pesticide applications and the issue of pesticides are reported to the Installation PMPC.

2 Prepare and submit the Pest Management Report (DD Form 1532) as required.

(4) OBSERVATION: Monitoring of the pest management program at the golf course was inadequate.

(a) BACKGROUND: The installation PMPC normally serves as the single POC for installation pest management issues. As such, he is responsible for all community-wide pest management activities. This includes the assurance that pest management operations are conducted so as to minimize

(ARDEC ECR Cont)

(a) BACKGROUND: None.

(b) CRITERIA: AR 420-76, paragraph 4-3

(c) DISCUSSION: Augmentation contracts may be utilized when necessary pest management operations cannot be accomplished by existing in-house personnel. The pest control provisions of all contracts must be reviewed for technical accuracy and approved by the MACOM PMC prior to seeking procurement. MACOM review and approval is to ensure all health and safety issues that may effect installation personnel, as well as compliance with environmental law, are addressed.

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(ARDEC ECR Cont)

(d) RECOMMENDATIONS:

1 Ensure inventories are kept current and provided to those individuals who require that information to fulfill their job responsibilities.

2 Ensure pesticides procured by the golf course for each growing season have been approved by the AMC PMC in writing.

3 Properly dispose of the USDA registered herbicide.

4 Contact the manufacturer or the Armed Forces Pest Management Board for a specimen label and affix it to the herbicide container of P.M.A.S.

5 Develop a monitoring program to ensure pesticide usage and procedures are in consonance with Army regulations.

(ARDEC ECR Cont)

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3 Properly dispose of the USDA registered herbicide.

4 Contact the manufacturer or the Armed Forces Pest Management Board for a specimen label and affix it to the herbicide container of P.M.A.S.

5 Develop a monitoring program to ensure pesticide usage and procedures are in consonance with Army regulations.

(ARDEC ECR Cont)

9. Water.

a. General:

(1) ARDEC operated a groundwater treatment plant consisting of chemical addition and filtration for iron and manganese removal, air stripping for Volatile Organic Compounds (VOCs) removal, and disinfection by chlorine. The plant began operating in Sep 88. Specific conditions contained in the construction permit were reviewed and found in general compliance; however, the required airgap for the backwash tank sludge discharge line was inadequate (less than twice the diameter of the pipe). A review of the Daily Monitoring Reports for Mar 92 indicated the plant was providing water in compliance with the applicable regulations. ARDEC also had a surface water plant which was not in operation due to its inability to produce water within the Maximum Contaminant Level (MCL) for VOCs.

(2) The certifications of the water supply and water treatment operators were current, and certification levels met State minimum requirements. Six Standard Operating Procedures (SOPs) had been prepared that extensively cover normal and emergency water system operations and procedures. Four of the SOPs were drafts.

(3) The water allocation permit issued by the State of New Jersey was current, and groundwater withdrawal for Mar 92 was within the allocated amount. The permit allows withdrawal from three production wells; however, only two of the wells were in operation. The wells were not tagged with the State permit number as required by the permit.

(4) Water demands were met by two separate distribution systems. One was the drinking water system, which provided potable water from the groundwater treatment plant, and the other was the service water system which provided nonpotable water obtained from a surface water supply. In general, the service water system provided water for irrigation, fire protection, cooling, and for uses such as floor and equipment cleaning. Where buildings have both service water and drinking water supplies, the commodes and urinals were typically served by the service water supply.

(5) The laboratory contracted to perform water quality testing was certified by the State. Inspection of the 1991 monitoring records indicated that the required tests were performed at the required frequencies. The MCL for two VOCs were exceeded in Oct 91 when the air blower for the stripping tower failed. The blower was repaired, the water quality was brought back into compliance, and the public notified. A review of bacteriological test records indicated that a positive total coliform test result occurred in Feb 91. The public was not notified. Unless the positive sample was

(ARDEC ECR Cont)

invalidated according to one of three criteria contained in the subparagraphs of 141.21c of the National Primary Drinking Water Rules, the public must be notified. The New Jersey Drinking Water Rules contain no discretionary changes to the national regulations amending the three criteria. The record did not clearly indicate which of the three criteria was the basis for invalidating the positive sample. There was no record indicating laboratory invalidation of the sample on the basis of an improper sample analysis (first criteria). The record indicated that the first repeat sample was negative; therefore, the State cannot invalidate based upon the result of repeat samples (second criteria) since all repeat samples at the same tap must be positive in order to meet this invalidation criteria. The third criteria permits the State to invalidate the sample if it has substantial grounds to believe that the positive sample was due to circumstance or condition which does not reflect water quality in the distribution system. The State must document the decision in writing. There was no written documentation of decision from the State in the files. The documentation available consisted of a letter, 8 Mar 91, from the EAD to the NJDEPE, indicating the test results, circumstances, and confirmation that ARDEC will not provide public notification.

b. Detailed Findings:

(1) OBSERVATION: ARDEC did not have a comprehensive cross-connection control program.

(a) BACKGROUND: A cross-connection program consists of an organized program to eliminate connections between the potable water system and nonpotable water sources. The cited criteria prohibits cross-connections and requires a program that includes instruction, routine inspection, and periodic surveys in order to detect and remove all potential or existing cross-connections and to ensure that proper protection measures are taken, such as airgaps and backflow protection devices. Recordkeeping requirements include a current inventory of devices and written documentation of tests performed, inspections, and corrective actions.

(b) CRITERIA: New Jersey Drinking Water Regulation, NJAC 7:10-1, et seq.

AR 40-5, paragraph 12-2f

Technical Bulletin (TB) MED 576, paragraph 4-2

(c) DISCUSSION: Past activity included locating and disconnecting valved connections between the drinking water and service water systems as required by the State of New Jersey. However, not all of the possible connection points had been checked because of accessibility problems. A service contractor performed an inspection for cross-connections several years ago and a number of protection devices were purchased. These devices were not installed and were placed in storage. No documentation existed of routine inspections and testing of known cross-connection control devices.

(ARDEC ECR Cont)

(d) RECOMMENDATION: Develop and implement a cross-connection control program that includes all of the required elements.

(2) OBSERVATION: Nonpotable water outlets, fire hydrants, and exposed water piping were not identified to distinguish them from the potable system.

(a) BACKGROUND: It is necessary to clearly identify the nonpotable water system to prevent inadvertent consumption of nonpotable water by the users. The cited criteria requires nonpotable distribution systems to be marked "NONPOTABLE". Color-coding of exposed pipes may be used to distinguish potable from nonpotable systems. As a BMP, nonpotable outlets should be uniformly marked to warn potential users that the water is not safe to drink.

(b) CRITERIA: TB MED 576, paragraph 4-5a

(c) DISCUSSION: Water service to a facility may consist of potable water only, nonpotable water only, or both. The water service piping in building 809 was not marked to identify it as nonpotable. The exterior hose outlets at building 80 were not marked as nonpotable. Some facilities with dual systems have markings on the valves to distinguish between the two systems. A marking system to identify fire hydrants as potable or nonpotable had been implemented. The system consisted of placing additional paint marks on a hydrant to identify it as on the drinking water system or on the service water system when the hydrant is tested and painted IAW the National Fire Protection Association standards.

(d) RECOMMENDATION: Mark all outlets on the nonpotable service water system as "NONPOTABLE". Mark or color code exposed nonpotable service piping in buildings. Complete fire hydrant coding.

(3) OBSERVATION: There was no SOP addressing timely notification of water users of any actual or anticipated noncompliance with drinking water standards.

(a) BACKGROUND: A water supplier is required to give notice to its water users whenever there is a failure to comply with Federal or State Primary Drinking Water Regulations. The cited criteria requires that timely notification be provided for in the SOP for alerting personnel in national or local emergencies. The Primary Drinking Water Regulations require the notifications be given to the public and to the State within specified time limits after the occurrence of a violation and in a manner as required in the regulation. The public must be notified within 14 days, unless the violation is one which may pose an acute risk; in that event, the public must be

(ARDEC ECR Cont)

notified within 72 hours. Additional notification requirements may also be required as provided for in the regulation. Notification to the State includes telephone notification within 48 hours, followed by notification in writing within 7 days.

(b) CRITERIA: AR 420-46, paragraph 5.d

(c) DISCUSSION: Notification was given to the NJDEPE and to the water users when the MCL for trichloroethylene was exceeded in water samples taken in Oct 91.

(d) RECOMMENDATION: Prepare an SOP for alerting personnel in national or local emergencies. The SOP should contain provisions to ensure that the water users will be notified within the time period and by the means required in the Primary Drinking Water Regulations.

(ARDEC ECR Cont)

10. Noise.

a. General: Noise was regularly generated at ARDEC through test firings and OD of explosive wastes. While the Zone II and Zone III contours for these impulse noises did not extend off post, complaints corresponding to Zone I noise levels off post were received during adverse weather conditions. ARDEC was taking appropriate measures to reduce and respond to such complaints, IAW the Army Installation Compatible Use Zone (ICUZ) program. Noise monitors were in place around the installation to formally document noise incidents, whether originating from ARDEC or other sites (such as the Mount Hope quarry). All testing activities were centrally managed to regulate the frequency of noise generation and ensure satisfactory operating conditions. Noise complaints were received and logged by the Public Affairs Office, who directed a same day official response to the complainant, and coordinated with the noise generating activity. In many cases, operations were modified or discontinued until meteorological conditions improved. As a result of these initiatives, noise complaints had significantly decreased over the last few years.

b. Detailed Findings:

OBSERVATION: The ICUZ Study was not approved.

(a) BACKGROUND: Central to the Army ICUZ program is the development and approval of a formal ICUZ Study, based on noise contours developed by the USAEHA and the Construction Engineering Research Laboratory (CERL). Once approved, the study serves as the basis for coordination with local planning and zoning boards to develop joint long-range use plans. When formalized by Memorandums of Understanding, the ability of the installation to protect its operational capabilities from the problems of noise incompatibility is enhanced.

(b) CRITERIA: AR 200-1, chapter 7
DARCOM Supplement 1 to AR 200-1, chapter 7 and
Appendix E

(c) DISCUSSION: Noise contours had been developed for ARDEC by CERL in 1987. This formed the basis for the preparation of a draft ICUZ study by contract, which ARDEC submitted to AMCCOM in 1988 to begin the approval process. Approval was never completed. By comparison to a recent USAEHA Environmental Noise Consultation (Mar 91), the contract study now appears to be out of date and irrelevant. While ARDEC has many of the operational aspects of the Army ICUZ program in place, without the approved study, formal coordination and long-range planning with local communities is hampered.

(ARDEC ECR Cont)

(d) RECOMMENDATIONS:

- 1 Update and request approval of the ARDEC ICUZ Study, using the AMC I&SA "ICUZ Preparation Guide" and cited criteria.
- 2 Use the approved ICUZ Study to complete the ICUZ process, to include coordination with local communities.

ANNEX A

ARDEC

POINT OF CONTACT REPORT

Date Is Fri May 15 1992

RPI NO: 34855

ECR	S	NAME	TITLE/ORGANIZATION	MGT	CAA	CWA	SPCC	RCRA	SWLF	TSCA	FIFRA	SDWA	ICUZ	PHONE NUMBER
SA	G	PASTUCK, JOHN	SUPV CHEM ENGR						X					D 880-6418
SA	G	PERSURANCE, BOB	ENV ENGR				X	X						D 880-7309
SA	G	ROWLAND, PETER	CH, PAD				X						X	D 880-6365
SA	G	SANCHEZ, FRED	ENV ENGR		X			X	X					D 880-5948
SA	G	SMITH, BOB	ENV ENGR		X								X	D 880-4716
SA	G	SOLECKI, TOM	CH, ENV AFFAIRS	X				X	X					D 880-5818
SA	G	SUAREZ, CHARLES	PEST CONTROLLER								X			D 880-3157

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U.S. ARMY ARMAMENT RESEARCH, DEVELOPMENT & ENGINEERING CNTR
ANNEX B
ENVIRONMENTAL COMPLIANCE REVIEW RECOMMENDATIONS REPORT
(SR/A = STATUTORY-REGULATORY OR ADMINISTRATIVE)

ITEM NO	MEDIA	OBSERV/ RECOM NO	SR/A	FACILITY NAME/ NUMBER	IR/SA COMMENTS	SPECIAL ATTENTION ITEM/ INSTALLATION RESPONSE
01	ENV MGT	1b1d	SR		Develop formal indexes of environmental files.	
02	AIR	2b1d	SR	Building 3801	Extend the fill pipes to within 6 inches of the bottom of the tanks.	CURRENT INSTALLATION MEETS THIS REQUIREMENT
03	AIR	2b2d1	SR		Complete an installation-wide asbestos survey.	
04	AIR	2b2d2	SR		Develop and execute a comprehensive asbestos management plan.	
05	AIR	2b2d3	SR		Ensure that personnel (contractor or Government) performing in both the installation-wide survey and the development of an asbestos management plan are trained at the appropriate level.	
06	AIR	2b3d	SR		Prepare a detailed Memorandum for Record which includes the date, time, contents of the call, and the NJDL representative's name.	
07	AIR	2b4d	SR		Provide appropriate levels of training for individuals that are required to serve in capacities other than asbestos abatement workers.	
08	WW	2b1d	SR		Amend the permit to allow minor intermittent flows of noncontact cooling water to be discharged into the sewerage system.	

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ITEM NO	MEDIA	OBSERV/ RECOM NO	SR/A	FACILITY NAME/ NUMBER	IRSA COMMENTS	SPECIAL ATTENTION ITEM/ INSTALLATION RESPONSE
- 09	SPILLS	4b1d1	SR		Contact the New Jersey State Emergency Response Commission to establish ARDEC's role in the State SARA Title III structure.	CONTACTED TROOPER CLEBERG REGARDING OUR ROLE. AWAITING RESPONSE FROM THEM. (STATE POLICE OFFICE OF EMERGENCY MGMT)
- 10	SPILLS	4b1d2	SR		Ensure the EPCRA information is included in the revision of the ARDEC SPCCP and ISOP.	AWAITING RESPONSE TO ABOVE TO BE INCORPORATED
- 11	HAZ WST	5b1d1	SR	Building 24	Immediately dispose of the seven 20-cubic yard roll-off containers of HW soil debris from the building 24 tank closures.	COMPLETED
- 12	HAZ WST	5b1d2	SR	Building 95	Ensure the twenty-five 20-cubic yard roll-off containers of HW soil debris from building 95 tank closures are disposed of within the allowed 90-day storage limit.	COMPLETED
- 13	HAZ WST	5b2d	SR	Building 31, bay 2	Remove, determine contents, and appropriately dispose of the five rusted containers at located at bay 2 of building 31.	COMPLETED
- 14	HAZ WST	5b3d1	SR	Building 519	Determine regulatory status of the building 519 tank.	LISTED AS SITE 50 IN RI CONCEPT PLAN TANKS TO BE ADDRESSED UNDER TECUP PROGRAM AND CERCLA
461- - 15	HAZ WST	5b3d2	SR	Building 519	Exercise the contingency plan and emergency procedures for the tank at building 519.	
- 16	HAZ WST	5b3d3	SR	Building 519	Appropriately close, remediate, and/or remove the building 519 tank and dispose of contents and any spill residues properly.	

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ITEM NO	MEDIA	OBSERV/ RECOM NO	SR/A	FACILITY NAME/ NUMBER	INSA COMMENTS	SPECIAL ATTENTION ITEM/ INSTALLATION RESPONSE
- 17	HAZ WST	5b4d	SR	Building 311	Ensure UST product level measurements are over the full range of the UST's height to the nearest one-eighth inch.	INFORMATION PROVIDED IN GUIDANCE FOLLOW-UP INSPECTIONS TO ENSURE COMPLIANCE WITH THIS REQUIREMENT
- 18	SOL WST	6b1d1	SR	Health Clinic	Medical Waste Storage Area: Segregate sharps from other regulated medical waste and place in separate containers prior to shipment to Fort Monmouth, NJ.	COMPLETED
- 19	SOL WST	6b1d2	SR	Dental Health Facility	Dental Health Facility: Obtain and utilize medical waste containers uniform with those from the Health Clinic.	CLINIC HAS REQUESTED CONTAINERS FROM FT. MONMOUTH
- 20	SOL WST	6b1d3	A	Dental Health Facility	Physically separate the medical waste container and the nonmedical waste container so they are not adjacent to one another.	COMPLETED
- 21	TSCA	7b1d	SR	Building 3114	Attach the regulatory markings to the building.	COMPLETED
- 22	TSCA	7b2d	SR		Remove inapplicable markings from the transformers.	NOT REQUIRED, BUT HAVE WILL BE REMOVED WHEN PCB CONTAMINATED LABELS OBTAINED.
962 23	PESTS	8b1d	SR		Prepare an IPMP and submit to AMC INSA for approval, utilizing guidance contained in AR 420-76, appendix C.	
24	PESTS	8b2c	SR		Ensure all contracts for pesticide operations are submitted to the AMC PMC for technical review and approval prior to seeking procurement.	

U.S. ARMY ARMAMENT RESEARCH, DEVELOPMENT & ENGINEERING CNTR
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ITEM NO	MEDIA	OBSERV/ RECOM NO	SR/A	FACILITY NAME/ NUMBER	I&SA COMMENTS	SPECIAL ATTENTION ITEM/ INSTALLATION RESPONSE
25	PESTS	8b3d1	SR		Ensure all pesticide applications and the issue of pesticides are reported to the installation FMPC.	
26	PESTS	8b3d2	SR		Prepare and submit the Pest Management Report (DD Form 1532) as required.	
27	PESTS	8b4d1	SR	Golf Course	Ensure inventories are kept current and provided to those individuals who require that information to fulfill their job responsibilities.	
28	PESTS	8b4d2	SR	Golf Course	Ensure pesticides procured by the golf course for each growing season have been approved by the AMC PMC in writing.	
29	PESTS	8b4d3	SR	Golf Course	Properly dispose of the USDA registered herbicide.	
30	PESTS	8b4d4	SR	Golf Course	Contact the manufacturer or the Armed Forces Pest Management Board for a specimen label and affix it to the herbicide container of P.M.A.S.	
31	PESTS	8b4d5	SR	Golf Course	Develop a monitoring program to ensure pesticide usage and procedures are in conformance with Army regulations.	
32	WATER	8b1d	SR		Develop and implement a cross-connection control program that includes all of the required elements.	

COMPLETED

U.S. ARMY ARMAMENT RESEARCH, DEVELOPMENT & ENGINEERING CNTR
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ENVIRONMENTAL COMPLIANCE REVIEW RECOMMENDATIONS REPORT
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ITEM NO	MEDIA	OBSERV/ RECOM NO	SR/A	FACILITY NAME/ NUMBER	ISSA COMMENTS	SPECIAL ATTENTION ITEM/ INSTALLATION RESPONSE
33	WATER	9b2d	SR		Mark all outlets on the nonpotable service water system as "NONPOTABLE." Mark or color code exposed nonpotable service piping in buildings. Complete fire hydrant coding.	
34	WATER	9b3d	SR		Prepare an SOP for alerting personnel in national or local emergencies. The SOP should contain provisions to ensure that the water users will be notified within the time period and by the means required in the Primary Drinking Water Regulations.	
35	NOISE	10b1d1	SR		Update and request approval of the ARDEC ICUZ Study, using the AMC ISSA "ICUZ Preparation Guide" and cited criteria.	
36	NOISE	10b1d2	SR		Use the approved ICUZ Study to complete the ICUZ process, to include coordination with local communities.	

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USAMC ENVIRONMENTAL COMPLIANCE DATABASE UPDATE REPORT
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PAGE	MEC	NONCOMPLIANCE ISSUE/DESCRIPTION	#/SEVERITY	FACILITY RESPONSE OR ACTION TAKEN/PROPOSED	TARGET DATE OF COMPLETION	% COMPLETE PRESENT
====	=====	=====	=====	=====	=====	=====
4-7	CAA	Standby plans for reducing the emission of air contaminants during periods of an air pollution alert, air pollution warning, and air pollution emergency could not be found. Personnel in the environmental office were not aware of such a plan having been prepared.	1 Inter	Plans completed and in file.	Mar 92	100%
4-8	CAA	Environmental office has an outdated written inventory of air emission sources.	6 Minor	A new data based inventory has been developed and is in use.	Complete	100%
4-11	CWA	A Best Management Practices plan has not been developed. The laboratory analyses of the dredged material indicated a highly contaminated soil. It is required that a BMP plan be implemented to reduce or minimize discharge of pollutants to surface water. No such control has been maintained at the dredge pile.	2 Minor	Dredge pile has been classified as nonhazardous. Future site will have a BMP. Pile will be handled under CERCLA.		
4-12	CWA	A few violations to the NJPDES permit of effluent discharge limitations for pH, TSS, and total residual chlorine were noted during the period Jan through Aug 85.	1 Minor	ACO with NJDEPE 12 Apr 91.	1999	25%
4-13	CWA	Discharge monitoring reports for 1985 indicated consistent violations of permitted discharge limitations for temperature and pH, and less frequent violations for chemical/oxygen demand (NJPDES permit).	1 Inter	ACO with NJDEPE 12 Apr 91. Violations of unpermitted discharges at lift stations will be administratively resolved by amendment to ACO.	1999	25%

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PAGE	MEC	NONCOMPLIANCE ISSUE/DESCRIPTION	#/SEVERITY	FACILITY RESPONSE OR ACTION TAKEN/PROPOSED	TARGET DATE OF COMPLETION	% COMPLETE PRESENTLY
=====	=====	=====	=====	=====	=====	=====
4-14	CWA	Discharge monitoring reports at the Environmental Technology and Energy Resources office indicated several violations of the permitted discharge limitations (Outfall 004) for pH, total chromium, and hexachromium between Jan 85 to Jul 85. No discharge was reported since Aug 85. No data was available in the files indicating that bioassay tests have been conducted.	1 Inter	Outfall permanently closed for over 2 years.	N/A	100%
4-15	CWA	No state permit was obtained for the dredging operation at Green Pond Brook which took place in 1984 to improve the hydraulic capacity of the channel through the golf course.	1 Inter	My predecessors didn't know what they were doing. File has been classified as nonhazardous. Part of the CERCLA IAG.	1995 ROD	
4-17	SPCC	The most recent ISCP is dated May 82. Changes which should be incorporated into the plan during a review include (1) Addition of the JP-4 jet fuel storage tank located at the Army/Aviation Support Facility, (2) The presence of an aboveground fuel storage tank without secondary containment at the Open Burning Grounds, and (3) Removal of several underground storage tanks from the list of tanks in use at the installation.	8 Inter	1. Most recent SPCC is dated Mar 91. 2. The JP-4 fuel storage tanks at the aviation support facility was addressed in the current SPCC. 3. The aboveground fuel storage tank at the OBG has been removed. 4. Tank list has been updated in the current SPCC.		
4-19	SPCC	Prediction of the flow direction and rates and total quantity which could be spilled are required in the ISCP.	9 Minor	These concerns are addressed in the SPCC, not the ISCP.		

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PAGE	NEC	NONCOMPLIANCE ISSUE/DESCRIPTION	#/SEVERITY	FACILITY RESPONSE OR ACTION TAKEN/PROPOSED	TARGET DATE OF COMPLETION	% COMPLETE PRESENT
=====	=====	=====	=====	=====	=====	=====
4-20	SPCC	Two copies of the SPCC plan have not been forwarded to AMC.	8 Minor	Copies of future revisions will be forwarded.		
4-23	RCRA	Personnel training records were not available.	1 Inter	Personnel training program records document that personnel take part in scheduled initial and recurring HW training.		100%
4-24	RCRA	PTA does not have a closure plan for the Burning Grounds.	1 Inter	Closure plan for DB is available.		100%
4-26	SW	There are three inactive sanitary landfills. There is a lack of information on type and location of waste, depth, and type of cover material, and the landfills' period of operation.	1 Inter	Past inactive landfill operations are just beginning to be investigated as to environmental impact. The landfills are included as part of the ARDEC CERCLA program. Significant contamination found at Post Farm sanitary landfill.		Unknown
4-28	TSCA	Facility records do not indicate daily inspection of transformers which have uncorrected leaks.	1 Inter	No recent leaks were noted.		100%
4-29	TSCA	PCB items must be marked with a PCB identifying mark and date when storage began. Drums were stored in areas without aisle space making some of the drums inaccessible so that labels could not be located.	1 Minor	All items in storage for disposal were marked and dated appropriately.		100%
4-33	WATER	Potable water was not tested for fluoride and combined radium -226, radium 228, and strontium-90.	1 Inter	Testing was performed at required frequency and for the required parameters.		100%

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USAMC ENVIRONMENTAL COMPLIANCE DATABASE UPDATE REPORT
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PAGE	MEC	NONCOMPLIANCE ISSUE/DESCRIPTION	#/SEVERITY	FACILITY RESPONSE OR ACTION TAKEN/PROPOSED	TARGET DATE OF COMPLETION	% COMPLETE PRESENT
=====	=====	=====	=====	=====	=====	=====
4-34	WATER	Records indicate that concentrations of endrin, manganese, and color exceeded their levels.	1 Inter	Water treatment plan constructed, water quality does not exceed MCLs.		100%
4-35	WATER	Water quality records not maintained for 10 years as required. Unable to determine if State or EPA was notified within 48 hours when water supply failed to meet primary drinking water standards.	1 Minor	Records are kept; State was notified of a temporary exceedance of an MCL.		100%

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